

CLAIMS

1. Multiple switch selection device, wherein a first member 2 is rotatably and tiltably arranged in relation to a second member 3, and that on said second member 3 one or more switch devices 4 are arranged within the periphery of said first member 2, such that by tilting said first member 2 one or more switches 4 on said second member 3 may be activated, **characterized in that** the switches 4 are of the tactile micro switch dome type, whereby a very low overall construction height is achieved, and that activation of a switch 4 occurs only by tilting the first member 2 as little as 2/10 mm at the periphery of the first member 2..
2. Device according to claim 1, **characterized in that** a reflective optical encoder is arranged in said second member, and that discrete reflective means are provided on the side of the first member facing the reflective optical encoder.
3. Device according to claim 1 or 2, **characterized in that** one or more tactile switch devices are evenly arranged along and inside the periphery of the first member on the second member, and that tilting the first member in a position superposing a switch generates a first signal, and tilting the first member in a position whereby two switches are activated generates a second signal, wherein the first signal depends on which of the one or more single switches is activated, and the second signal is independent of which switches are activated.
4. Device according to any preceding claim, **characterized in that** an intermediate load transferring and distributing member is arranged between the first member and the second member, where said intermediate member comprises a relatively stiff upper layer made from materials such as metals, plastics or similar materials and a lower resilient layer made from materials such as rubbers, plastics or similar materials, and that said intermediate member has an area at least such that it covers the switches arranged on the second member.
5. Device according to any preceding claim, **characterized in that** the first member is a disc, which disc is connected to the second member by means of a bearing, such that

an axle provided centrally in the disc and perpendicular to the plane of the disc is held with play in an aperture provided in the intermediate member and the second member or alternatively that either the axle or the inside wall of the aperture is conically shaped, such that the axle may tilt in relation to the plane of the second member, whereby the tilting action of the first member is facilitated.

6. Device according to claim 6, characterized in that a dome foil is provided where said foil covers the upper surface of the second member and the upper surfaces of the switch devices, and that in the aperture constituting the bearing wall in the aperture, two rings comprising flanges are provided, where said rings may be pressed together in interlocking relationship such that the second member and the intermediate member are held by the flanges of the two rings.

7. Device according to any preceding claim, characterized in that the first member may be provided with a torus on the side facing the second member, and that on the intermediate member facing the second member protrusions superposed the switches arranged on the second member are provided, and optionally between the protrusions and the bearing a number of secondary protrusions may be provided.

8. Electronic device such as a mobile phone, hand held computer, navigation device or other appliances such as for example radios, televisions, telephones or any other appliance where it is desirable to allow a user to enter input, comprising a device according to any of claims 1 to 7.